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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,772	09/15/2003	Yoav Hollander	MR3529-22	7242
4586 7590 02/20/2008 ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			EXAMINER KHATRI, ANIL	
			ART UNIT 2191	PAPER NUMBER
			MAIL DATE 02/20/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/661,772

Applicant(s)

HOLLANDER ET AL.

Examiner

Anil Khatri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This action is in response to the request for reconsideration filed on 12/18/2007.
2. As per applicant's request claim 1 has been amended.
3. As per applicant request claims 1-23 has been considered but they are not persuasive.
4. Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by *Lowe et al* USPN 6,081,864.

In remarks applicant argues,

- I. Automatically generating at least one test for a device under test.
- II. Generated from at least one selected scenario as to provide at least one input for driving simulation operation of the device under test.

In response to applicant's argument,

- I. It was noted that cited reference fairly suggest automatically generating at least one test for a device under test (column 18, lines 58-67 and column 19, lines 1-19, The advantages of having functional verification of a device through incoherent external memory spaces include: (1) The device under test can read from anywhere it desires, expanding its effective memory range; (2) Automatic memory relocation tables can be generated upon each initial access to memory areas, relieving the test simulation from the requirement to set up limited tables in advance. This also allows the randomization of the memory relocation table mappings. More memory

locations can be spanned with dynamic storage allocation rather than reserving large amounts of memory upon the initialization of a test. Memory accesses with relocation can therefore be scattered more widely over the available memory space rather than having them congested in a single or a few small areas. Different devices under test may read or write the memory space without following a predetermined sequence of operations; (3) Errors can be injected into the data being retrieved to test proper response of the device under test to externally corrupted data, i.e. whether the device under test can properly recover in such an environment. Errors can be randomized if desired; (4) The non-coherent nature of the memory also allows for easier modeling of externally modified components or locations such as cache memory within a processor that is modified dynamically by a CPU. Memory with additional tag and status information is also much more easily varied. For example, a MESI cache within a CPU can be configured to return multiple states (Modified, Exclusive, Shared, Invalid) and different data upon each access by the device under test, without having to synchronize CPU activity with the activity of the device). Therefore, examiner interprets that automatic process is involved which relates to the test generation for the device under test.

II. It was also noted that cited reference fairly teaches generated from at least one selected scenario as to provide at least one input for driving simulation operation of the device under test (column 19, lines 40-60; To keep the number of tests manageable, configuration and bus stimulus are separated, with the configurations defined dynamically at run time based on parameters passed into the simulation at run time. These steps are depicted through blocks 804, 806 and 808 in FIG. 8. As shown there, the test stimulus (block 807) and the functionality

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verification of the device under test (block 809) are performed in a manner that is independent of the test configuration selected under step 804. As an example only, the selection of the test configuration under step 804 may include determination of amount, type and number of memory banks in the system, ascertainment of the operating mode of an external device or of the device under test, computation of an address of a PCI device, or selection of the type of a CPU. These and other parameters may be taken into account depending on the device under test and depending on the problem to be solved. Every desired test configuration is first compiled and then simulated at run-time without having to modify the set of test stimuli stored in the stimulus file 201 or to redefine on every new simulation the transaction checking or functional verification mechanism). Therefore, examiner interprets that it allows one or more test can be chosen or managed by the user based on user-supplied parameter (see abstract and summery of the invention).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anil Khatri whose telephone number is 571-272-3725. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


ANIL KHATRI
PRIMARY EXAMINER